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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/821,375

04/08/2004

Kyung Ku Kim

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1606

35884 7590 11/06/2007  
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EXAMINER

FINEMAN, LEE A

ART UNIT

PAPER NUMBER

2872

MAIL DATE

DELIVERY MODE

11/06/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

**Office Action Summary**

Application No.

10/821,375

Applicant(s)

KIM, KYUNG KU

Examiner

Lee Fineman

Art Unit

2872

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 29 August 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,3-6,8 and 16-33 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,3-6,8 and 16-33 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 April 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Claim Count of the Application under Examination*

1. The instant application contains the following number of claims:  
  
Number of independent claims: 5.  
Number of total claims: 24.  
Number of elected independent claims: 5 (withdrawn claims not included).  
Number of total elected claims: 24 (withdrawn claims not included).
2. This Office Action is in response to an amendment filed 29 August 2007 in which claims 1, 5, 8, 24 and 30 were amended and claim 34 was cancelled. Claims 1, 3-6, 8 and 16-33 are pending.

### *Specification*

3. The disclosure is objected to because of the following informalities: On page 2, lines 6, 9, and 11 "upper glass substrate 2" should be --upper glass substrate 7--.  
  
Appropriate correction is required.

### *Claim Rejections - 35 USC § 103*

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1, 3-6, 8 and 16-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shimamura et al., US 6,808,773 (henceforth Shimamura) in view Kamiya et al., WO 02/066570 A1 (henceforth Kamiya). **NOTE:** US 2004/0076768 A1 (Kamiya) is the English equivalent of the prior art and will be referred to in the rejection.

Regarding claims 1, 3 and 4, Shimamura discloses in fig. 5 a front filter of a plasma display panel, the front filter comprising: a frame adhesive (12c and 22) located between an antireflection layer (20a) and an electromagnetic shielding layer (14, 16a) of the front filter, having a transparent adhesive (12c) formed at an active display area of the plasma display panel and a black frame (22) formed at a nonactive display area surrounding the active display area (fig. 5). Shimamura discloses the claimed invention except for wherein the black frame is a black adhesive; wherein the black adhesive is being formed by mixing the transparent adhesive with a black material; and wherein the black adhesive is 0.05 ~50% black material. Kamiya teaches in figs. 4 and 5 using a black adhesive frame (12<sub>B</sub>) in a display panel wherein the black frame is also a black adhesive and wherein the black adhesive is being formed by mixing the transparent adhesive with a black material (page 1, section [0019]). It would have been obvious to one of ordinary skill in the art at the time the invention was made to replace the black frame portion of Shimamura with the black adhesive frame of Kamiya to provide an effective screen frame while also providing better adhesion between layers (Kamiya et al., page 2, section [0021], lines 8-12). Further, regarding claim 4, it would have been obvious to one having ordinary skill in the art at the time the invention was made to make the black material 0.05 ~50% of the mixture, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering an optimum value or working ranges involves only routine skill in the art. One

would have been motivated to make the black material 0.05 ~50% of the mixture for the purpose of supplying the correct opacity to the frame. *In re Aller*, 220 F.2d 454, 456 105 USPQ 233, 235.

Regarding claims 5-6 and 16-20, Shimamura in view of Kamiya as set forth above further disclose wherein the front filter is attached to an upper glass substrate of a plasma display panel (not shown, column 1, lines 34-35); has a near infrared shielding layer (18), and comprises a plurality of adhesives (12c-f) formed between the near infrared shielding layer (18), the electromagnetic shielding layer (14, 16a) and the antireflection layer (20a), wherein the black frame adhesive defines an active display area of the plasma display panel (see fig. 5 of Shimamura); wherein the frame adhesive is formed on the electromagnetic shielding layer (see fig. 5 of Shimamura); wherein a transparent adhesive (12c) is formed at an area that is overlapped with the active display area (fig. 5); and a base film (10).

Regarding claim 8, Shimamura further discloses a fabrication method of a front filter of a plasma display panel comprising: preparing a base film (10); forming a black frame (22) at a nonactive display area of the plasma display panel (fig. 5), wherein the nonactive display area is positioned on the base film (fig. 5); and forming a transparent adhesive (12c) at an active display area of the plasma display panel, wherein the active display area is positioned on the base film (fig. 5), and wherein the black frame and the transparent adhesive are located between an antireflection layer (20a) and an electromagnetic shielding layer (14, 16a) of the front filter (fig. 5). Shimamura discloses the claimed invention except for wherein the black frame is a black adhesive. Kamiya teaches in figs. 4 and 5 using a black adhesive frame (12B) in a display panel wherein the black frame is also a black adhesive (page 1, section [0019]). It would have been obvious to one of ordinary skill in the art at the time the invention was made to replace the black

frame portion of Shimamura with the black adhesive frame of Kamiya to provide an effective screen frame while also providing better adhesion between layers (Kamiya et al., page 2, section [0021], lines 8-12).

Regarding claims 24 and 30, Shimamura further discloses a fabrication method of a front filter of a plasma display panel, the method comprising: preparing a base film (10); forming a transparent adhesive (12c) at an active display area of the plasma display panel (fig. 5), wherein the active display area is positioned on the base film (fig. 5); and forming a black frame (22) at a nonactive display area of the plasma display panel after forming the transparent adhesive (column 12, line 62-column 13, line 1, in at least so far as the transparent adhesive is manufactured first), wherein the nonactive display area is positioned on the base film (fig. 5), and wherein the black frame and the transparent adhesive are located between an antireflection layer (20a) and an electromagnetic shielding layer (14, 16a) of the front filter (fig. 5). Shimamura discloses the claimed invention except for wherein the black frame is a black adhesive. Kamiya teaches in figs. 4 and 5 using a black adhesive frame (12<sub>B</sub>) in a display panel wherein the black frame is also a black adhesive (page 1, section [0019]). It would have been obvious to one of ordinary skill in the art at the time the invention was made to replace the black frame portion of Shimamura with the black adhesive frame of Kamiya to provide an effective screen frame while also providing better adhesion between layers (Kamiya et al., page 2, section [0021], lines 8-12).

Regarding claims 21, 27 and 31, Shimamura further disclose wherein the nonactive display area is positioned on an outer area of the active display area (fig. 5).

Regarding claims 23, 29 and 33, Shimamura further disclose wherein the transparent adhesives are formed by one of a printing method, a laminating method and a pressing method (column 6, lines 60-65).

Regarding claims 22, 28 and 32, Shimamura in view of Kamiya further disclose wherein the black adhesives are formed by one of a printing method, a laminating method and a pressing method (pressing method, page 2, section [0021] of Kamiya).

Regarding claims 25 and 26, Shimamura in view of Kamiya disclose the claimed invention except for wherein the steps for fabricating the transparent and black adhesive include using screen masks. However, Shimamura further teaches that screen masks are used to form very accurate, specific patterns in fabricating elements of front filters for plasma display panels as demonstrated by using a screen mask to form the copper foil of the electromagnetic shielding layer shield (see column 7, lines 3-8). It would have been obvious to one of ordinary skill in the art at the time the invention was made to use screen masks to form the transparent and black adhesive to provide very accurate, specific pattern shapes.

### *Response to Arguments*

6. Applicant's arguments with respect to claims 1, 3-6, 8 and 16-33 have been considered but are moot in view of the new ground(s) of rejection.

7. It is noted by the Examiner that the 112 rejection made in the previous Office Action have been withdrawn due to amendment by the Applicant.

*Conclusion*

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lee Fineman whose telephone number is (571) 272-2313. The examiner can normally be reached on Monday - Friday 7:30 - 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephone B. Allen can be reached on (571) 272-2434. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



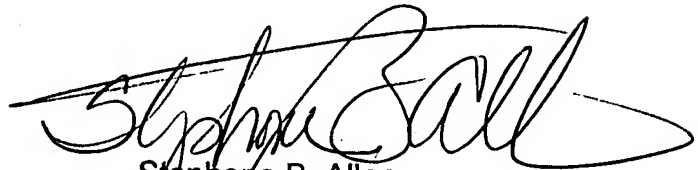
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Art Unit: 2872

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



LAF  
30 October 2007



Stephone B. Allen  
Supervisory Patent Examiner